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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,288	01/14/2002	Arnold Wilkie	0818.0125C	5437
27896	7590	04/20/2004	EXAMINER	
EDEL, SHAPIRO, FINNAN & LYTLE, LLC 1901 RESEARCH BOULEVARD SUITE 400 ROCKVILLE, MD 20850			MAYES, MELVIN C	
			ART UNIT	PAPER NUMBER
			1734	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/043,288	<b>Applicant(s)</b> WILKIE ET AL.	
	<b>Examiner</b> Melvin Curtis Mayes	<b>Art Unit</b> 1734	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
     4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/22/02</u> . | 6) <input type="checkbox"/> Other: ____  |

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**DETAILED ACTION**

***Election/Restrictions***

(1)

Applicant's election without traverse of Claims 7-12 in Paper filed 4/8/2004 is acknowledged.

***Claim Rejections - 35 USC § 103***

(2)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

(3)

Claims 7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. 2002/0063364 in view of the admitted prior art.

Taylor et al. 2002/0063364 discloses a process of producing a multicomponent spunbonded nonwoven fabric comprising: separately melting two or more polymeric components; separately directing the molten polymeric components through the spin beam assembly equipped with a distribution plate having channels for separately conveying the polymeric materials so that the separate molten components combine at a multiplicity of spinnerette orifices to form filaments containing two or more polymer components; extruding the filaments; directing quenching air to the filaments in a quenching chamber; stretching the filaments in a filament attenuator; and depositing the filaments onto a belt to form a nonwoven web of filaments. Filaments can be extruded from the spinnerette orifices in patterns such as sheath/core, side-by-side, segmented pie, islands-in-the-sea, tipped profile, checkerboard, orange peel, etc. The quench chamber, filament attenuator and depositing unit used is the system described in U.S. Pat. No. 5,814,349 ([0004]-[0032]).

The admitted prior art teaches that in a typical closed fiber spinning system known in the art of manufacturing spunbond fabrics, such as described in U.S. Patent No. 5,814,349, filaments are spun, quenched and drawn in a common enclosed chamber or environment, such that the air or gas stream that is utilized to quench the fibers emerging from a spinneret is also utilized to

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draw and attenuate the fibers downstream from the quenching stage and interference from uncontrolled and potentially detrimental air currents during fiber formation is eliminated (pg. 1, lines 15-28).

By using, with the spin beam assembly, a quench chamber, filament attenuator and depositing unit system as described in U.S. Pat. No. 5,814,349, the method is obviously used in a system which maintains an enclosed environment, as the admitted prior art teaches that a typical closed fiber spinning system known in the art such as described in U.S. Patent No. 5,814,349 spins, quenches and draws filaments in a common enclosed chamber or environment such that the air or gas stream that is utilized to quench the fibers emerging from a spinneret is also utilized to draw and attenuate the fibers downstream from the quenching stage and interference from uncontrolled and potentially detrimental air currents during fiber formation is eliminated.

(4)

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 7 above, and further in view of Herwegh et al. 5,700,491.

Taylor et al. disclose that the polymeric materials differ significantly in melting points.

Herwegh et al. teach that the melt lines for advancing molten plastic in a spin beam for spinning a plurality of synthetic filament yarns are heated by a heating medium (col. 3, lines 5-8).

It would have been obvious to one of ordinary skill in the art to have modified the method of the references as combined by directing the different molten polymeric components to the spin beam assembly by advancing the different components via melt lines heated by a heating medium, as taught by Herwegh et al, as used to advance molten plastic to a spin beam for

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spinning a plurality of filaments. By advancing the different molten polymeric components to the spin beam assembly by heated melt lines, separate polymer streams of different polymer components are obviously segregated into a plurality of manifolds, as claimed. Maintaining the melt lines (manifolds) for the different polymeric components at different temperatures would have been obvious to one of ordinary skill in the art, as Taylor et al. disclose that the polymeric materials to be directed to the spin assembly differ significantly in melting points and thus should be heated to different temperatures while being advanced via the heated melt lines.

(5)

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 7 above, and further in view of Hills et al. 5,466,410.

Hills et al. teach that in making plural component fibers from a spin pack assembly, different types of fibers are formed depending on which polymer components is delivered at a greater flow rate than that of the other polymer component (col. 18, lines 45-51).

It would have been obvious to one of ordinary skill in the art to have modified the method of the references as combined by delivering the different molten polymeric components to the spin beam assembly at different flow rates, as taught by Hills et al., depending on the type of plural component filaments to be made. Delivering the molten polymer components at different flow rates (i.e. varying flow rates) would have been obvious to one of ordinary skill in the art depending on the type of multicomponent fiber to be formed.

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*Conclusion*

(6)

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DE 100 01 521 teaches using a heated pipe system for distributing molten polymer to a spinning beam assembly.

WO 99/48668 teaches feeding different polymers to a spin pack via heated pipes.

(7)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Curtis Mayes whose telephone number is 571-272-1234. The examiner can normally be reached on Mon-Fri 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

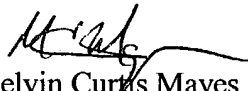
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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Melvin Curtis Mayes  
Primary Examiner  
Art Unit 1734

MCM

April 15, 2004